Nuclear Instruments and Methods in Physics Research B43 (1989) 593–600
North-Holland, Amsterdam

AUTHOR INDEX

Abromeit, C., see Naundorf, V. B43 (1989) 513
Ahmad, N., see Matiullah B43 (1989) 581
Alford, T.L., see Børgesen, P. B43 (1989) 165
Alimova, L.Ya., see Radjabov, T.D. B43 (1989) 176
Allen, W.R., see Lewis, M.B. B43 (1989) 243
Alston, S., Faddeev approach to electron capture B43 (1989) 19
Andrä, H.J., Electronic interaction of multicharged ions with metal surfaces at low velocities B43 (1989) 306
Antolak, A.J., see Bauer, G.H. B43 (1989) 497
Arakawa, E.T., see Kamada, M. B43 (1989) 525
Arnold, W., see Habs, D. B43 (1989) 390
Arora, B.M., see Banerjee, S. B43 (1989) 570
Avila, O., G. Murillo and S.E. Darden, Effect of beam energy resolution on resonance widths obtained from phase shift analyses B43 (1989) 131
Azuma, Y., see Dunford, R.W. B43 (1989) 459

Babb, J.F., see Habs, D. B43 (1989) 390
Bachmann, T., K. Gärtner and E. Wendler, Surface composition of GaAs determined by means of Rutherford backscattering spectrometry B43 (1989) 193
Bachmann, T. and H. Bartsch, The microstructure of short-time-annealed Se^{+}-implanted GaAs B43 (1989) 529
Badnell, N.R., see Pindzola, M.S. B43 (1989) 279
Bakos, J.S., see Kocsis, G. B43 (1989) 215
Banerjee, S., B.M. Arora, M.B. Kurup and K.G. Prasad, Channeling and photoluminescence studies of heat-treated InP single crystals B43 (1989) 570
Bárány, A., see Schuch, R. B43 (1989) 411
Bardsley, J.N., see Levine, M.A. B43 (1989) 431
Bartsch, H., see Bachmann, T. B43 (1989) 529
Bastasz, R.J., see Schmieder, R.W. B43 (1989) 318
Bauer, G.H., A.J. Antolak, A.E. Pontau, D.H. Morse, D.W. Heikkinen and I.D. Proctor, Proton energy straggling measurements in aluminium, titanium, silver and tungsten foils B43 (1989) 497
Baumann, W., see Habs, D. B43 (1989) 390
Behr, K.H., see Steinhof, A. B43 (1989) 73
Beiersdorfer, P., S. Von Goeler, M. Bitter and K.W. Hill, Atomic physics studies of highly charged ions on tokamaks using X-ray spectroscopy B43 (1989) 347
Beiersdorfer, P., see Levine, M.A. B43 (1989) 431
Belyaev, A.D., Z.S. Bikbova, V.L. Gaishan, T.L. Gurvich, V.I. Kogan, V.P. Pikul and A.M. Usmandiyarov, Some peculiarities in ionic charge distributions of $^{241}Pu(n_{th}, f)$-fission products B43 (1989) 5
Bennett, C.L., see Levine, M.A. B43 (1989) 431
Béres, Cs., A. Fenyvesi, P. Jakucs, I. Mahunka, Z. Kovács, T. Molnár, L. Szabó and F. Ditrói, Application of an MGC-20 cyclotron and methods of radioecology in solution of problems of forestry and the wood industry . B43 (1989) 101
Berger, J., see Habs, D. B43 (1989) 390
Bernstein, E.M., see Tanis, J.A. B43 (1989) 290
Berry, H.G., see Dunford, R.W. B43 (1989) 459
Betts, R.R., Anomalous positrons from heavy ion collisions: past results and future plans B43 (1989) 294
Bikbova, Z.S., see Belyaev, A.D. B43 (1989) 5
Birattari, C., M.C. Cantone, A. Ferrari and M. Silari, Residual radioactivity at the Milan AVF cyclotron B43 (1989) 119
Bisoffi, G., see Habs, D. B43 (1989) 390
Bitter, M., see Beiersdorfer, P. B43 (1989) 347
Blatt, P., see Habs, D. B43 (1989) 390
Blum, M., see Habs, D. B43 (1989) 390
Boaretto, E., see Steinhof, A. B43 (1989) 73
Børgesen, P., R.E. Wistrom, T.L. Alford, D.A. Lilienfeld and H.H. Johnson, Room temperature ion beam mixing of aluminum with titanium hydride B43 (1989) 165
Bottcher, C., see Pindzola, M.S. B43 (1989) 279

0168-583X/89/$03.50 © Elsevier Science Publishers B.V.
(North-Holland Physics Publishing Division)

Bottcher, C., see Rhoades-Brown, M.J. B43 (1989) 301
Boyer, K., see Luk, T.S. B43 (1989) 468
Briggs, J.S., see Thumm, U. B43 (1989) 471
Brizzolara, R.A. and C.B. Cooper, Measurements of energy distributions and yields of neutral Cu_2 and Cu_3 species sputtered from Cu by low energy Ar^+ ions B43 (1989) 136
Brown, I.G., J.E. Galvin, R.A. MacGill and M.W. West, Multiply charged metal ion beams B43 (1989) 455
Brunelle, A., S. Della-Negra, J. Depauw, H. Joret, Y. Le Beyec and K. Wien, Equilibrium charge state of fast heavy ions in solids measurements of post-ionization effects B43 (1989) 484
Brunelle, A., S. Della-Negra, J. Depauw, H. Joret and Y. Le Beyec, A simple way to study secondary ion emission by heavy multicharged ions at medium energy ($\approx$ 115 keV). Application to hydrogen ion emission (*Letter to the Editor*) B43 (1989) 586
Brünle, A., see Steinhof, A. B43 (1989) 73
Bugrov, V.N., see Karamyan, S.A. B43 (1989) 153
Buhl, R.A., see Lewis, M.B. B43 (1989) 243
Bürger, G., see Kocsis, G. B43 (1989) 215
Burns, G., see Wie, C.R. B43 (1989) 560

Cai Xiaohong, see Liu Zhaoyuan B43 (1989) 162
Campbell, J.L., W.J. Teesdale and J.A. Maxwell, Foil thickness measurement via the $K\beta/K\alpha$ intensity ratio of proton-induced X-rays B43 (1989) 197
Campbell, J.L., see Maxwell, J.A. B43 (1989) 218
Campbell, J.L., J.-X. Wang and W.J. Teesdale, Compton-scattering contribution to response function of Si(Li) X-ray detectors B43 (1989) 490
Campbell, J.L., J.-X. Wang, J.A. Maxwell and W.J. Teesdale, An exact treatment of secondary and tertiary fluorescence enhancement in PIXE B43 (1989) 539
Cantone, M.C., see Birattari, C. B43 (1989) 119
Carter, G., I.V. Katardjiev and M.J. Nobes, The deduction of spatially variable effective diffusivity from ballistic atomic mixing studies B43 (1989) 149
Chantrenne, S., see Tanis, J.A. B43 (1989) 290
Chen, M.H., Relativity: X-ray and Auger transitions of highly charged ions B43 (1989) 366
Chen, M.H., see Levine, M.A. B43 (1989) 431
Chen Yuanru, see Zhu Zhongsheng B43 (1989) 92
Chrisey, D.B. and G.P. Summers, Radiation effects in the high T_c superconductor $YBa_2Cu_3O_{7-\delta}$ B43 (1989) 50
Church, D.A., Research with multi-charged ions using synchrotron radiation and ion traps B43 (1989) 441
Church, D.A., see Dunford, R.W. B43 (1989) 459
Clark, M.W., see Tanis, J.A. B43 (1989) 290
Cook, S.W., see Lewis, M.B. B43 (1989) 243
Cooper, C.B., see Brizzolara, R.A. B43 (1989) 136
Cowan, T., see Levine, M.A. B43 (1989) 431

Dacol, F.H., see Wie, C.R. B43 (1989) 560
Danared, H., see Schuch, R. B43 (1989) 411
Darden, S.E., see Avila, O. B43 (1989) 131
Datz, S., see Tanis, J.A. B43 (1989) 290
De Castro Faria, N.V., M.J. Gaillard, J.C. Poizat and J. Remillieux, H^- production from single collision of fast H_3^+ ions in a gas target B43 (1989) 1
De Ferrariis, L.F., see Sánchez, E.A. B43 (1989) 29
Deco, G.R., see Martínez, A.E. B43 (1989) 24
Delafond, J., see Jaouen, C. B43 (1989) 34
Della-Negra, S., see Brunelle, A. B43 (1989) 484
Della-Negra, S., see Brunelle, A. B43 (1989) 586
Depauw, J., see Brunelle, A. B43 (1989) 484
Depauw, J., see Brunelle, A. B43 (1989) 586
Deslattes, R.D., Projectile spectroscopy in a cooler ring B43 (1989) 333
Dietrich, D., see Levine, M.A. B43 (1989) 431
Dinneen, T.P., see Dunford, R.W. B43 (1989) 459
Ditrói, F., see Takács, S. B43 (1989) 99
Ditrói, F., see Béres, Cs. B43 (1989) 101
Dittner, P.F., see Tanis, J.A. B43 (1989) 290
Djamaletdinova, I.E., see Radjabov, T.D. B43 (1989) 176
Dörner, R., see Schmidt-Böcking, H. B43 (1989) 272

Dunford, R.W., C.J. Liu, N.B. Mansour, Y. Azuma, H.G. Berry, D.A. Church, T.P. Dinneen, L. Young and B.J. Zabransky, Polarized targets for atomic physics experiments with highly charged ions B43 (1989) 459
Dutta, D., see Habs, D. B43 (1989) 390

Elander, N., see Schuch, R. B43 (1989) 411

Fainstein, P.D., see Martínez, A.E. B43 (1989) 24
Falcone, R.W., see Murnane, M.M. B43 (1989) 463
Farnham, D.L., see Moore, F.L. B43 (1989) 425
Faulstich, A., see Habs, D. B43 (1989) 390
Fehn, U., P.W. Kubik, P. Sharma and R.T.D. Teng, Comment on "The composition of kamacite in iron meteorites investigated by accelerator mass spectrometry, neutron activation analysis and analytical electron microscopy" by K.L. Rasmussen et al. (*Letter to the Editor*) B43 (1989) 254
Feng Jiazhen, see Liu Zhaoyuan B43 (1989) 162
Fenyvesi, A., see Béres, Cs. B43 (1989) 101
Ferrari, A., see Birattari, C. B43 (1989) 119
Fink, D., see Steinhof, A. B43 (1989) 73
Fink, D., see Middleton, R. B43 (1989) 231
Finn, R., see Meyer Jr, W. B43 (1989) 112
Foster, C.C., see Tanis, J.A. B43 (1989) 290
Friedrich, A., see Habs, D. B43 (1989) 390

Gaillard, M.J., see De Castro Faria, N.V. B43 (1989) 1
Gain, L., see Lässer, R. B43 (1989) 67
Gaishan, V.L., see Belyaev, A.D. B43 (1989) 5
Galassini, S., N.Q. Liu, G. Moschini, A. Tasca, G. Villi and V. Valkovic, Trace element variability in kidney stones B43 (1989) 556
Galvin, J.E., see Brown, I.G. B43 (1989) 455
Gärtner, K., see Bachmann, T. B43 (1989) 193
Gerhard, M., see Habs, D. B43 (1989) 390
Geyer, C., see Habs, D. B43 (1989) 390
Gibson, G., see Luk, T.S. B43 (1989) 468
Goudeau, P., see Jaouen, C. B43 (1989) 34
Graham, W.G., see Tanis, J.A. B43 (1989) 290
Grieser, M., see Habs, D. B43 (1989) 390
Grieser, R., see Habs, D. B43 (1989) 390
Griffin, D.C., see Pindzola, M.S. B43 (1989) 279
Gurvich, T.L., see Belyaev, A.D. B43 (1989) 5

Habs, D., W. Baumann, J. Berger, P. Blatt, A. Faulstich, P. Krause, G. Kilgus, R. Neumann, W. Petrich, R. Stokstad, D. Schwalm, E. Szmola, K. Welti, A. Wolf, S. Zwickler, E. Jaeschke, D. Krämer, G. Bisoffi, M. Blum, A. Friedrich, C. Geyer, M. Grieser, H.W. Heyng, B. Holzer, R. Ihde, M. Jung, K. Matl, W. Ott, B. Povh, R. Repnow, M. Steck, E. Steffens, D. Dutta, T. Kühl, D. Marx, S. Schröder, M. Gerhard, R. Grieser, G. Huber, R. Klein, M. Krieg, N. Schmidt, R. Schuch, J.F. Babb, L. Spruch, W. Arnold and A. Noda, First experiments with the Heidelberg test storage ring TSR B43 (1989) 390
Haftel, M.I. and M. Rosen, A heat deposition model of Josephson junction soft upset rates from alpha-particle irradiation B43 (1989) 55
Hahn, Y. and H. Ramadan, Analysis of transfer excitation collisions of S^{13+} with He B43 (1989) 285
Hajdu, C., see Szilágyi, E. B43 (1989) 502
Hecking, N., see Schönborn, A. B43 (1989) 170
Heikkinen, D.W., see Bauer, G.H. B43 (1989) 497
Henderson, J.R., see Levine, M.A. B43 (1989) 431
Hentschel, E., R. Kotte, H.G. Ortlepp, F. Stary and D. Wohlfarth, Performance of a Bragg ionization chamber for depth profiling and surface analysis B43 (1989) 82
Heyng, H.W., see Habs, D. B43 (1989) 390
Hill, K.W., see Beiersdorfer, P. B43 (1989) 347
Hollos, G., see Steinhof, A. B43 (1989) 73
Holzer, B., see Habs, D. B43 (1989) 390
Huber, G., see Habs, D. B43 (1989) 390

Ignácz, P.N., see Kocsis, G. B43 (1989) 215
Ihde, R., see Habs, D. B43 (1989) 390
Inamura, T., see Katsuragawa, H. B43 (1989) 259

Jacobs, W.W., see Tanis, J.A. B43 (1989) 290
Jaeschke, E., see Habs, D. B43 (1989) 390
Jakucs, P., see Béres, Cs. B43 (1989) 101
Jaouen, C., J. Delafond, N. Junqua and P. Goudeau, Ion-beam mixing and phase formation in the immiscible Fe–Mg system B43 (1989) 34
Jaracz, P. and S. Mirowski, Beam distribution in the skew profile geometry for PIXE setup with a diffuser foil . . B43 (1989) 210
Jiang Weilin, see Lu Xiting B43 (1989) 565
Jin Zuqin, see Zhu Zhongsheng B43 (1989) 92
Johnson, H.H., see Børgesen, P. B43 (1989) 165
Jonk, P., B. Schmiedeskamp, H.E. Roosendaal and H.O. Lutz, Long-range shadowing and focusing effects of planar quasichanneled He^+ ions in GaP B43 (1989) 9
Joret, H., see Brunelle, A. B43 (1989) 484
Joret, H., see Brunelle, A. B43 (1989) 586
Jung, M., see Habs, D. B43 (1989) 390
Junqua, N., see Jaouen, C. B43 (1989) 34

Kachurin, G.A., I.E. Tyschenko, A.P. Mazhirin and E. Wieser, High-temperature phosphorus ion doping of silicon B43 (1989) 535
Kamada, M. and E.T. Arakawa, Electron-excited optical emission from H_2O adsorbed on potassium halides at low temperatures B43 (1989) 525
Kapteyn, H.C., see Murnane, M.M. B43 (1989) 463
Karamyan, S.A., Yu.Ts. Oganessian and V.N. Bugrov, The effect of high-energy ions heavier than argon on a germanium single crystal and a new mechanism for autorecrystallization B43 (1989) 153
Katardjiev, I.V., see Carter, G. B43 (1989) 149
Katsuragawa, H., T. Minowa and T. Inamura, High density atomic beam source by a laser ablation method (*Letter to the Editor*) B43 (1989) 259
Kilgus, G., see Habs, D. B43 (1989) 390
Klein, J., see Middleton, R. B43 (1989) 231
Klein, R., see Habs, D. B43 (1989) 390
Knapp, D.A., see Levine, M.A. B43 (1989) 431
Kocsis, G., J.S. Bakos, G. Bürger and P.N. Ignácz, Electron density measurement on the MT-1 tokamak by means of combined resonance-fluorescence and laser blow-off B43 (1989) 215
Kogan, V.I., see Belyaev, A.D. B43 (1989) 5
Konoplev, V.M., Influence of dose effects on depth distribution of implanted particles B43 (1989) 159
Kótai, E., see Szilágyi, E. B43 (1989) 502
Kotte, R., see Hentschel, E. B43 (1989) 82
Kovács, Z., see Béres, Cs. B43 (1989) 101
Krämer, D., see Habs, D. B43 (1989) 390
Krause, P., see Habs, D. B43 (1989) 390
Krieg, M., see Habs, D. B43 (1989) 390
Kubik, P.W., see Fehn, U. B43 (1989) 254
Kühl, T., see Habs, D. B43 (1989) 390
Kurup, M.B., see Banerjee, S. B43 (1989) 570
Kutschera, W., see Steinhof, A. B43 (1989) 73

Laming, J.M., Interpretation of nonstatistical fine structure intensity ratios in hydrogenic beam–foil spectra . . . B43 (1989) 359
Larsson, N.P.-O., U.A.S. Tapper and B.G. Martinsson, Characterization of the response function of a Si(Li) detector using an absorber technique B43 (1989) 574
Lässer, R., L. Gain and H. Trinkaus, Gamma diffractometry of tantalum and niobium tritides B43 (1989) 67
Le Beyec, Y., see Brunelle, A. B43 (1989) 484
Le Beyec, Y., see Brunelle, A. B43 (1989) 586
Lennard, W.N., S.Y. Tong, I.V. Mitchell and G.R. Massoumi, An alternative technique for oxygen surface coverage measurements B43 (1989) 187
Levine, M.A., R.E. Marrs, J.N. Bardsley, P. Beiersdorfer, C.L. Bennett, M.H. Chen, T. Cowan, D. Dietrich, J.R. Henderson, D.A. Knapp, A. Osterheld, B.M. Penetrante, M.B. Schneider and J.H. Scofield, The use of an electron beam ion trap in the study of highly charged ions B43 (1989) 431
Lewis, M.B., W.R. Allen, R.A. Buhl, N.H. Packan, S.W. Cook and L.K. Mansur, Triple ion beam irradiation facility B43 (1989) 243

Lewis, R.R., Symmetry tests with highly charged ions . . . B43 (1989) 378
Li Sujie, see Lu Zhiheng . . . B43 (1989) 46
Lilienfeld, D.A., see Børgesen, P. . . . B43 (1989) 165
Liu, C.J., see Dunford, R.W. . . . B43 (1989) 459
Liu Jiarui, see Lu Xiting . . . B43 (1989) 565
Liu Jihu, see Liu Zhaoyuan . . . B43 (1989) 162
Liu, N.Q., see Galassini, S. . . . B43 (1989) 556
Liu Shaoxiang, see Liu Zhaoyuan . . . B43 (1989) 162
Liu Zhaoyuan, Cai Xiaohong, Ma Shuxun, Liu Jihu, Feng Jiazhen, Liu Shaoxiang and Zheng Zhihao, L-subshell ionization of Dy and Ho by 0.4–3.0 MeV protons . . . B43 (1989) 162
Lövestam, N.E.G. and E. Swietlicki, An external beam setup for the Lund proton microprobe . . . B43 (1989) 104
Lu Xiting, Xie Yuan, Zheng Zhongshuang, Jiang Weilin and Liu Jiarui, A new method for profiling boron . . . B43 (1989) 565
Lu Zhiheng, Zhang Chaoming, Li Sujie, Luo Yan and Zhang Huixing, Shallow junction formation with boron fluoride and low energy boron ion implantation into silicon . . . B43 (1989) 46
Luk, T.S., A. McPherson, G. Gibson, K. Boyer and C.K. Rhodes, Ion production and molecular excitation occurring in multiphoton processes . . . B43 (1989) 468
Luo Yan, see Lu Zhiheng . . . B43 (1989) 46
Lutz, H.O., see Jonk, P. . . . B43 (1989) 9

Ma Shuxun, see Liu Zhaoyuan . . . B43 (1989) 162
MacGill, R.A., see Brown, I.G. . . . B43 (1989) 455
Macht, M.-P., R. Willecke and V. Naundorf, Limits of depth resolution for sputter sectioning: a secondary ion mass spectrometry investigation of ^{63}Ni in nickel . . . B43 (1989) 507
Mahunka, I., see Takács, S. . . . B43 (1989) 99
Mahunka, I., see Béres, Cs. . . . B43 (1989) 101
Mair, G.L.R., On the onset voltage of liquid metal ion sources . . . B43 (1989) 240
Mannervik, S., see Schuch, R. . . . B43 (1989) 411
Mansour, N.B., see Dunford, R.W. . . . B43 (1989) 459
Mansur, L.K., see Lewis, M.B. . . . B43 (1989) 243
Manuaba, A., see Szilágyi, E. . . . B43 (1989) 502
Marrs, R.E., see Levine, M.A. . . . B43 (1989) 431
Martínez, A.E., G.R. Deco, R.D. Rivarola and P.D. Fainstein, Electron capture and ionization in atomic collisions . . . B43 (1989) 24
Martinson, I., Spectroscopy of highly charged, many-electron atoms . . . B43 (1989) 323
Martinsson, B.G., see Larsson, N.P.-O. . . . B43 (1989) 574
Marx, D., see Habs, D. . . . B43 (1989) 390
Massoumi, G.R., see Lennard, W.N. . . . B43 (1989) 187
Matiullah and N. Ahmad, The influence of a water/tissue phantom on the response of a CR-39-based thermal-neutron dosimeter . . . B43 (1989) 581
Matl, K., see Habs, D. . . . B43 (1989) 390
Maxwell, J.A., see Campbell, J.L. . . . B43 (1989) 197
Maxwell, J.A., J.L. Campbell and W.J. Teesdale, The Guelph PIXE software package . . . B43 (1989) 218
Maxwell, J.A., see Campbell, J.L. . . . B43 (1989) 539
Mazhirin, A.P., see Kachurin, G.A. . . . B43 (1989) 535
McPherson, A., see Luk, T.S. . . . B43 (1989) 468
Meyer, H.O., Preparations for research with the Indiana Cooler . . . B43 (1989) 383
Meyer Jr, W., P. Plascjak, R. Finn, Y. Sheh, S. Regdos and A. Mignerey, A novel krypton gas target . . . B43 (1989) 112
Middleton, R., J. Klein and D. Fink, A CO_2 negative ion source for ^{14}C dating . . . B43 (1989) 231
Mignerey, A., see Meyer Jr, W. . . . B43 (1989) 112
Miller, P.A. (*Book review*: Electron and ion optics, by M. Szilagyi) . . . B43 (1989) 589
Minowa, T., see Katsuragawa, H. . . . B43 (1989) 259
Miranda, J., A. Oliver and E.C. Montenegro, A new method for thin-film thickness measurement using PIXE . . . B43 (1989) 203
Mirowski, S., see Jaracz, P. . . . B43 (1989) 210
Mitchell, I.V., see Lennard, W.N. . . . B43 (1989) 187
Mitchell, J.B.A., see Tanis, J.A. . . . B43 (1989) 290
Møller, P.J. (*Book review*: Physics of solid surfaces 1987 (Proceedings 4th Symposium on Surface Physics, Bechyne Castle, Czechoslovakia, September 1987) edited by J. Koukal) . . . B43 (1989) 127
Molnár, T., see Béres, Cs. . . . B43 (1989) 101
Montenegro, E.C., see Miranda, J. . . . B43 (1989) 203
Moore, F.L., D.L. Farnham, P.B. Schwinberg and R.S. Van Dyck Jr, Physics accesible through ultrahigh resolution trapped ion mass spectroscopy . . . B43 (1989) 425

More, R.M., Semiclassical matrix-elements of high-charge ions B43 (1989) 372
Morse, D.H., see Bauer, G.H. B43 (1989) 497
Moschini, G., see Galassini, S. B43 (1989) 556
Mowat, J.R., see Tanis, J.A. B43 (1989) 290
Müller, M., Channeling investigations of irradiation induced defects in a dilute Cu–Mn alloy B43 (1989) 181
Murillo, G., see Avila, O. B43 (1989) 131
Murnane, M.M., H.C. Kapteyn and R.W. Falcone, Sub-picosecond laser produced plasmas B43 (1989) 463

Naundorf, V., see Macht, M.-P. B43 (1989) 507
Naundorf, V. and C. Abromeit, Limits of depth resolution for sputter sectioning: moments of tracer depth distribution B43 (1989) 513
Neumann, R., see Habs, D. B43 (1989) 390
Nobes, M.J., see Carter, G. B43 (1989) 149
Noda, A., see Habs, D. B43 (1989) 390
Norman, E.B., The interplay of nuclear and atomic physics in the synthesis of the elements B43 (1989) 374

Oganessian, Yu.Ts., see Karamyan, S.A. B43 (1989) 153
Oliver, A., see Miranda, J. B43 (1989) 203
Olson, R.E., see Schmidt-Böcking, H. B43 (1989) 272
Ortlepp, H.G., see Hentschel, E. B43 (1989) 82
Osterheld, A., see Levine, M.A. B43 (1989) 431
Ott, W., see Habs, D. B43 (1989) 390

Packan, N.H., see Lewis, M.B. B43 (1989) 243
Pászti, F., see Szilágyi, E. B43 (1989) 502
Paul, M., see Steinhof, A. B43 (1989) 73
Penetrante, B.M., see Levine, M.A. B43 (1989) 431
Peterson, R.S., see Rosseel, T.M. B43 (1989) 14
Petrich, W., see Habs, D. B43 (1989) 390
Pettit, G.D., see Wie, C.R. B43 (1989) 560
Pikul, V.P., see Belyaev, A.D. B43 (1989) 5
Pindzola, M.S., D.C. Griffin, C. Bottcher and N.R. Badnell, Electron-impact ionization and recombination in multiply charged atomic ions B43 (1989) 279
Plascjak, P., see Meyer Jr, W. B43 (1989) 112
Pogrebnjak, A.D., G.E. Remnev and I.G. Romanov, Physical and mechanical changes in HPIB-irradiated steels B43 (1989) 41
Poizat, J.C., see De Castro Faria, N.V. B43 (1989) 1
Pontau, A.E., see Bauer, G.H. B43 (1989) 497
Povh, B., see Habs, D. B43 (1989) 390
Prasad, K.G., see Banerjee, S. B43 (1989) 570
Proctor, I.D., see Bauer, G.H. B43 (1989) 497

Radjabov, T.D., L.Ya. Alimova and I.E. Djamaletdinova, Modification of gas-selective properties of polymer membranes by thin film deposition and carbon ion implantation B43 (1989) 176
Ramadan, H., see Hahn, Y. B43 (1989) 285
Rasmussen, K.L., Negative ion production efficiencies for the OSIRIS experiment on iron meteorites: a reply to Fehn et al. (*Letter to the Editor*) B43 (1989) 256
Regdos, S., see Meyer Jr, W. B43 (1989) 112
Remillieux, J., see De Castro Faria, N.V. B43 (1989) 1
Remnev, G.E., see Pogrebnjak, A.D. B43 (1989) 41
Repnow, R., see Habs, D. B43 (1989) 390
Rhoades-Brown, M.J., C. Bottcher and M.R. Strayer, Electromagnetic phenomena and collider performance at ultrarelativistic energies B43 (1989) 301
Rhodes, C.K., see Luk, T.S. B43 (1989) 468
Riggi, F., Emission of hydrogen cluster from insulating films under fast heavy ion bombardment B43 (1989) 520
Rivarola, R.D., see Martínez, A.E. B43 (1989) 24
Robinson, A.L., see Schlachter, A.S. B43 (1989) 450
Roeckl, E., see Steinhof, A. B43 (1989) 73
Romanov, I.G., see Pogrebnjak, A.D. B43 (1989) 41
Roosendaal, H.E., see Jonk, P. B43 (1989) 9
Rosen, M., see Haftel, M.I. B43 (1989) 55
Rosseel, T.M., C.R. Vane, J.P. Young, R.A. Zuhr and R.S. Peterson, High-resolution HIXSE studies of the chemical environment of sulfur implanted in quartz glass B43 (1989) 14

Sánchez, E.A., L.F. De Ferrariis and S. Suárez, Convoy-electron-yield dependence on controlled surface properties by Na deposition . . . B43 (1989) 29
Sapirstein, J., Field theoretic effects in highly charged ions . . . B43 (1989) 338
Schlachter, A.S., Multiple-electron processes in fast ion–atom collisions . . . B43 (1989) 265
Schlachter, A.S. and A.L. Robinson, Research opportunities in atomic physics at the advanced light source B43 (1989) 450
Schmidt, N., see Habs, D. . . . B43 (1989) 390
Schmidt-Böcking, H., J. Ullrich, R. Schuch, R.E. Olson and R. Dörner, Electronic transitions in highly charged ion–atom collisions . . . B43 (1989) 272
Schmieder, R.W. and R.J. Bastasz, Enhanced secondary ion yield from high charge state ions incident on a metal surface . . . B43 (1989) 318
Schmiedeskamp, B., see Jonk, P. . . . B43 (1989) 9
Schneider, D., see Tanis, J.A. . . . B43 (1989) 290
Schneider, M.B., see Levine, M.A. . . . B43 (1989) 431
Schönborn, A., N. Hecking and E.H. Te Kaat, Dynamic Monte Carlo simulation of high dose effects during ion bombardment . . . B43 (1989) 170
Schröder, S., see Habs, D. . . . B43 (1989) 390
Schuch, R., see Schmidt-Böcking, H. . . . B43 (1989) 272
Schuch, R., see Habs, D. . . . B43 (1989) 390
Schuch, R., A. Bárány, H. Danared, N. Elander and S. Mannervik, Storage rings, a new tool for atomic physics . B43 (1989) 411
Schwalm, D., see Habs, D. . . . B43 (1989) 390
Schwinberg, P.B., see Moore, F.L. . . . B43 (1989) 425
Scofield, J.H., see Levine, M.A. . . . B43 (1989) 431
Sharma, P., see Fehn, U. . . . B43 (1989) 254
Sheh, Y., see Meyer Jr, W. . . . B43 (1989) 112
Silari, M., see Birattari, C. . . . B43 (1989) 119
Snead Jr, C.L., see Vanier, P.E. . . . B43 (1989) 116
Spruch, L., see Habs, D. . . . B43 (1989) 390
Stary, F., see Hentschel, E. . . . B43 (1989) 82
Steck, M., see Habs, D. . . . B43 (1989) 390
Steffens, E., see Habs, D. . . . B43 (1989) 390
Steinhof, A., K.H. Behr, A. Brünle, E. Roeckl, E. Boaretto, M. Paul, D. Fink, G. Hollos and W. Kutschera, Electromagnetic isotope enrichment for accelerator mass spectrometry of ^{41}Ca . . . B43 (1989) 73
Stockli, M.P., see Tanis, J.A. . . . B43 (1989) 290
Stokstad, R., see Habs, D. . . . B43 (1989) 390
Strayer, M.R., see Rhoades-Brown, M.J. . . . B43 (1989) 301
Suárez, S., see Sánchez, E.A. . . . B43 (1989) 29
Summers, G.P., see Chrisey, D.B. . . . B43 (1989) 50
Swietlicki, E., see Lövestam, N.E.G. . . . B43 (1989) 104
Szabó, L., see Béres, Cs. . . . B43 (1989) 101
Szilágyi, E., F. Pászti, A. Manuaba, C. Hajdu and E. Kótai, Cross section measurements of the $^{1}H(^{4}He, ^{4}He)^{1}H$ elastic recoil reaction for ERD analysis . . . B43 (1989) 502
Szmola, E., see Habs, D. . . . B43 (1989) 390

Takács, S., F. Ditrói and I. Mahunka, Investigation of aluminium made by powder metallurgy by using the CPAA method . . . B43 (1989) 99
Tanis, J.A., E.M. Bernstein, S. Chantrenne, M.W. Clark, S. Datz, P.F. Dittner, C.C. Foster, W.G. Graham, W.W. Jacobs, J.B.A. Mitchell, J.R. Mowat, D. Schneider and M.P. Stockli, Proposed measurements of dielectronic recombination using the Indiana Cooler Facility . . . B43 (1989) 290
Tapper, U.A.S., see Larsson, N.P.-O. . . . B43 (1989) 574
Tasca, A., see Galassini, S. . . . B43 (1989) 556
Te Kaat, E.H., see Schönborn, A. . . . B43 (1989) 170
Teesdale, W.J., see Campbell, J.L. . . . B43 (1989) 197
Teesdale, W.J., see Maxwell, J.A. . . . B43 (1989) 218
Teesdale, W.J., see Campbell, J.L. . . . B43 (1989) 490
Teesdale, W.J., see Campbell, J.L. . . . B43 (1989) 539
Teng, R.T.D., see Fehn, U. . . . B43 (1989) 254
Thumm, U. and J.S. Briggs, Mechanisms of ion neutralization at surfaces in fast collisions . . . B43 (1989) 471
Tong, S.Y., see Lennard, W.N. . . . B43 (1989) 187
Träbert, E., Identification of intercombination lines in beam–foil spectra of highly ionized Ag . . . B43 (1989) 362
Trinkaus, H., see Lässer, R. . . . B43 (1989) 67
Tyschenko, I.E., see Kachurin, G.A. . . . B43 (1989) 535

Ullrich, J., see Schmidt-Böcking, H. B43 (1989) 272
Usmandiyarov, A.M., see Belyaev, A.D. B43 (1989) 5

Valkovic, V., see Galassini, S. B43 (1989) 556
Van Dyck Jr, R.S., see Moore, F.L. B43 (1989) 425
Vane, C.R., see Rosseel, T.M. B43 (1989) 14
Vanier, P.E., M.S. Zucker and C.L. Snead Jr, X-ray emission yields from both surfaces of thin targets bombarded with a 200-MeV H^- beam B43 (1989) 116
Villi, G., see Galassini, S. B43 (1989) 556
Von Goeler, S., see Beiersdorfer, P. B43 (1989) 347

Wang, J.-X., see Campbell, J.L. B43 (1989) 490
Wang, J.-X., see Campbell, J.L. B43 (1989) 539
Welti, K., see Habs, D. B43 (1989) 390
Wendler, E., see Bachmann, T. B43 (1989) 193
West, M.W., see Brown, I.G. B43 (1989) 455
Wie, C.R., G. Burns, F.H. Dacol, G.D. Pettit and J.M. Woodall, X-ray and Raman studies of MeV ion-bombarded GaInAs/GaAs B43 (1989) 560
Wien, K., see Brunelle, A. B43 (1989) 484
Wieser, E., see Kachurin, G.A. B43 (1989) 535
Willecke, R., see Macht, M.-P. B43 (1989) 507
Winterbon, K.B., Finite-angle multiple scattering revisited B43 (1989) 146
Wistrom, R.E., see Børgesen, P. B43 (1989) 165
Wohlfarth, D., see Hentschel, E. B43 (1989) 82
Wolf, A., see Habs, D. B43 (1989) 390
Woodall, J.M., see Wie, C.R. B43 (1989) 560

Xie Yuan, see Lu Xiting B43 (1989) 565

Young, J.P., see Rosseel, T.M. B43 (1989) 14
Young, L., see Dunford, R.W. B43 (1989) 459

Zabransky, B.J., see Dunford, R.W. B43 (1989) 459
Zhang Chaoming, see Lu Zhiheng B43 (1989) 46
Zhang Huixing, see Lu Zhiheng B43 (1989) 46
Zheng Zhihao, see Liu Zhaoyuan B43 (1989) 162
Zheng Zhongshuang, see Lu Xiting B43 (1989) 565
Zhu Zhongsheng, Jin Zuqin and Chen Yuanru, Microstructure analyses at different depths of nitrogen-implanted layers formed on 40 Cr steel B43 (1989) 92
Zucker, M.S., see Vanier, P.E. B43 (1989) 116
Zuhr, R.A., see Rosseel, T.M. B43 (1989) 14
Zwickler, S., see Habs, D. B43 (1989) 390

Nuclear Instruments and Methods in Physics Research B43 (1989) 601–604
North-Holland, Amsterdam

SUBJECT INDEX

Basic data for materials modification and analysis

H^- production from single collision of fast H_3^+ ions in a gas target, De Castro Faria, N.V., M.J. Gaillard, J.C. Poizat and J. Remillieux B43 (1989) 1
Some peculiarities in ionic charge distributions of $^{241}Pu(n_{th}, f)$-fission products, Belyaev, A.D., Z.S. Bikbova, V.L. Gaishan, T.L. Gurvich, V.I. Kogan, V.P. Pikul and A.M. Usmandiyarov B43 (1989) 5
Effect of beam energy resolution on resonance widths obtained from phase shift analyses, Avila, O., G. Murillo and S.E. Darden B43 (1989) 131

Proceedings of the Workshop on Highly Charged Ions: New Physics and Advanced Techniques (Berkeley, CA, USA, March 13–15, 1989)

Section I. Electron and ion collisions

Multiple-electron processes in fast ion–atom collisions, Schlachter, A.S. B43 (1989) 265
Electronic transitions in highly charged ion–atom collisions, Schmidt-Böcking, H., J. Ullrich, R. Schuch, R.E. Olson and R. Dörner B43 (1989) 272
Electron-impact ionization and recombination in multiply charged atomic ions, Pindzola, M.S., D.C. Griffin, C. Bottcher and N.R. Badnell B43 (1989) 279
Analysis of transfer excitation collisions of S^{13+} with He, Hahn, Y. and H. Ramadan B43 (1989) 285
Proposed measurements of dielectronic recombination using the Indiana Cooler Facility, Tanis, J.A., E.M. Bernstein, S. Chantrenne, M.W. Clark, S. Datz, P.F. Dittner, C.C. Foster, W.G. Graham, W.W. Jacobs, J.B.A. Mitchell, J.R. Mowat, D. Schneider and M.P. Stockli B43 (1989) 290
Anomalous positrons from heavy ion collisions: past results and future plans, Betts, R.R. B43 (1989) 294
Electromagnetic phenomena and collider performance at ultrarelativistic energies, Rhoades-Brown, M.J., C. Bottcher and M.R. Strayer B43 (1989) 301
Electronic interaction of multicharged ions with metal surfaces at low velocities, Andrä, H.J. B43 (1989) 306
Enhanced secondary ion yield from high charge state ions incident on a metal surface, Schmieder, R.W. and R.J. Bastasz B43 (1989) 318

Section II. Spectroscopy, level structure and related topics

Spectroscopy of highly charged, many-electron atoms, Martinson, I. B43 (1989) 323
Projectile spectroscopy in a cooler ring, Deslattes, R.D. B43 (1989) 333
Field theoretic effects in highly charged ions, Sapirstein, J. B43 (1989) 338
Atomic physics studies of highly charged ions on tokamaks using X-ray spectroscopy, Beiersdorfer, P., S. Von Goeler, M. Bitter and K.W. Hill B43 (1989) 347
Interpretation of nonstatistical fine structure intensity ratios in hydrogenic beam–foil spectra, Laming, J.M. . . . B43 (1989) 359
Identification of intercombination lines in beam–foil spectra of highly ionized Ag, Träbert, E. B43 (1989) 362
Relativity: X-ray and Auger transitions of highly charged ions, Chen, M.H. B43 (1989) 366
Semiclassical matrix-elements of high-charge ions, More, R.M. B43 (1989) 372
The interplay of nuclear and atomic physics in the synthesis of the elements, Norman, E.B. B43 (1989) 374
Symmetry tests with highly charged ions, Lewis, R.R. B43 (1989) 378

Section III. Advanced techniques

Preparations for research with the Indiana Cooler, Meyer, H.O. B43 (1989) 383
First experiments with the Heidelberg test storage ring TSR, Habs, D., W. Baumann, J. Berger, P. Blatt, A. Faulstich, P. Krause, G. Kilgus, R. Neumann, W. Petrich, R. Stokstad, D. Schwalm, E. Szmola, K. Welti, A.

0168-583X/89/$03.50 © Elsevier Science Publishers B.V.
(North-Holland Physics Publishing Division)

Wolf, S. Zwickler, E. Jaeschke, D. Krämer, G. Bisoffi, M. Blum, A. Friedrich, C. Geyer, M.Grieser, H.W. Heyng, B. Holzer, R. Ihde, M. Jung, K. Matl, W. Ott, B. Povh, R. Repnow, M. Steck, E. Steffens, D. Dutta, T. Kühl, D. Marx, S. Schröder, M. Gerhard, R. Grieser, G. Huber, R. Klein, M. Krieg, N. Schmidt, R. Schuch, J.F. Babb, L. Spruch, W. Arnold and A. Noda B43 (1989) 390
Storage rings, a new tool for atomic physics, Schuch, R., A. Bárány, H. Danared, N. Elander and S. Mannervik . B43 (1989) 411
Physics accesible through ultrahigh resolution trapped ion mass spectroscopy, Moore, F.L., D.L. Farnham, P.B. Schwinberg and R.S. Van Dyck Jr B43 (1989) 425
The use of an electron beam ion trap in the study of highly charged ions, Levine, M.A., R.E. Marrs, J.N. Bardsley, P. Beiersdorfer, C.L. Bennett, M.H. Chen, T. Cowan, D. Dietrich, J.R. Henderson, D.A. Knapp, A. Osterheld, B.M. Penetrante, M.B. Schneider and J.H. Scofield B43 (1989) 431
Research with multi-charged ions using synchrotron radiation and ion traps, Church, D.A. B43 (1989) 441
Research opportunities in atomic physics at the advanced light source, Schlachter, A.S. and A.L. Robinson B43 (1989) 450
Multiply charged metal ion beams, Brown, I.G., J.E. Galvin, R.A. MacGill and M.W. West B43 (1989) 455
Polarized targets for atomic physics experiments with highly charged ions, Dunford, R.W., C.J. Liu, N.B. Mansour, Y. Azuma, H.G. Berry, D.A. Church, T.P. Dinneen, L. Young and B.J. Zabransky B43 (1989) 459
Sub-picosecond laser produced plasmas, Murnane, M.M., H.C. Kapteyn and R.W. Falcone B43 (1989) 463
Ion production and molecular excitation occurring in multiphoton processes, Luk, T.S., A. McPherson, G. Gibson, K. Boyer and C.K. Rhodes B43 (1989) 468

Mechanisms of ion neutralization at surfaces in fast collisions, Thumm, U. and J.S. Briggs B43 (1989) 471
Equilibrium charge state of fast heavy ions in solids: measurements of post-ionization effects, Brunelle, A., S. Della-Negra, J. Depauw, H. Joret, Y. Le Beyec and K. Wien B43 (1989) 484
Compton-scattering contribution to response function of Si(Li) X-ray detectors, Campbell, J.L., J.-X. Wang and W.J. Teesdale B43 (1989) 490
Proton energy straggling measurements in aluminium, titanium, silver and tungsten foils, Bauer, G.H., A.J. Antolak, A.E. Pontau, D.H. Morse, D.W. Heikkinen and I.D. Proctor B43 (1989) 497
Cross section measurements of the $^{1}H(^{4}He, ^{4}He)^{1}H$ elastic recoil reaction for ERD analysis, Szilágyi, E., F. Pászti, A. Manuaba, C. Hajdu and E. Kótai B43 (1989) 502

Atomic collisions in solids

Long-range shadowing and focusing effects of planar quasichanneled He^{+} ions in GaP, Jonk, P., B. Schmiedeskamp, H.E. Roosendaal and H.O. Lutz B43 (1989) 9
High-resolution HIXSE studies of the chemical environment of sulfur implanted in quartz glass, Rosseel, T.M., C.R. Vane, J.P. Young, R.A. Zuhr and R.S. Peterson B43 (1989) 14
Faddeev approach to electron capture, Alston, S. B43 (1989) 19
Electron capture and ionization in atomic collisions, Martínez, A.E., G.R. Deco, R.D. Rivarola and P.D. Fainstein B43 (1989) 24
Convoy-electron-yield dependence on controlled surface properties by Na deposition, Sánchez, E.A., L.F. De Ferrariis and S. Suárez B43 (1989) 29
Measurements of energy distributions and yields of neutral Cu_2 and Cu_3 species sputtered from Cu by low energy Ar^{+} ions, Brizzolara, R.A. and C.B. Cooper B43 (1989) 136
Finite-angle multiple scattering revisited, Winterbon, K.B. B43 (1989) 146
The deduction of spatially variable effective diffusivity from ballistic atomic mixing studies, Carter, G., I.V. Katardjiev and M.J. Nobes B43 (1989) 149
The effect of high-energy ions heavier than argon on a germanium single crystal and a new mechanism for autorecrystallization, Karamyan, S.A., Yu.Ts. Oganessian and V.N. Bugrov B43 (1989) 153
Influence of dose effects on depth distribution of implanted particles, Konoplev, V.M. B43 (1989) 159
L-subshell ionization of Dy and Ho by 0.4–3.0 MeV protons, Liu Zhaoyuan, Cai Xiaohong, Ma Shuxun, Liu Jihu, Feng Jiazhen, Liu Shaoxiang and Zheng Zhihao B43 (1989) 162
Limits of depth resolution for sputter sectioning: a secondary ion mass spectrometry investigation of ^{63}Ni in nickel, Macht, M.-P., R. Willecke and V. Naundorf B43 (1989) 507
Limits of depth resolution for sputter sectioning: moments of tracer depth distribution, Naundorf, V. and C. Abromeit B43 (1989) 513
Emission of hydrogen clusters from insulating films under fast heavy ion bombardment, Riggi, F. B43 (1989) 520
Electron-excited optical emission from H_2O adsorbed on potassium halides at low temperatures, Kamada, M. and E.T. Arakawa B43 (1989) 525

The microstructure of short-time-annealed Se^+-implanted GaAs, Bachmann, T. and H. Bartsch B43 (1989) 529
A simple way to study secondary ion emission by heavy multicharged ions at medium energy (≈ 115 keV). Application to hydrogen ion emission, Brunelle, A., S. Della-Negra, J. Depauw, H. Joret and Y. Le Beyec .. B43 (1989) 586

Ion beam modification of materials

Ion-beam mixing and phase formation in the immiscible Fe–Mg system, Jaouen, C., J. Delafond, N. Junqua and P. Goudeau B43 (1989) 34
Physical and mechanical changes in HPIB-irradiated steels, Pogrebnjak, A.D., G.E. Remnev and I.G. Romanov B43 (1989) 41
Shallow junction formation with boron fluoride and low energy boron ion implantation into silicon, Lu Zhiheng, Zhang Chaoming, Li Sujie, Luo Yan and Zhang Huixing B43 (1989) 46
Room temperature ion beam mixing of aluminum with titanium hydride, Børgesen, P., R.E. Wistrom, T.L. Alford, D.A. Lilienfeld and H.H. Johnson B43 (1989) 165
Dynamic Monte Carlo simulation of high dose effects during ion bombardment, Schönborn, A., N. Hecking and E.H. Te Kaat B43 (1989) 170
Modification of gas-selective properties of polymer membranes by thin film deposition and carbon ion implantation, Radjabov, T.D., L.Ya. Alimova and I.E. Djamaletdinova B43 (1989) 176
High-temperature phosphorus ion doping of silicon, Kachurin, G.A., I.E. Tyschenko, A.P. Mazhirin and E. Wieser B43 (1989) 535

Effects of radiation

Radiation effects in the high T_c superconductor $YBa_2Cu_3O_{7-\delta}$, Chrisey, D.B. and G.P. Summers B43 (1989) 50
A heat deposition model of Josephson junction soft upset rates from alpha-particle irradiation, Haftel, M.I. and M. Rosen B43 (1989) 55
Gamma diffractometry of tantalum and niobium tritides, Lässer, R., L. Gain and H. Trinkaus B43 (1989) 67

Analysis of materials

Electromagnetic isotope enrichment for accelerator mass spectrometry of ^{41}Ca, Steinhof, A., K.H. Behr, A. Brünle, E. Roeckl, E. Boaretto, M. Paul, D. Fink, G. Hollos and W. Kutschera B43 (1989) 73
Performance of a Bragg ionization chamber for depth profiling and surface analysis, Hentschel, E., R. Kotte, H.G. Ortlepp, F. Stary and D. Wohlfarth B43 (1989) 82
Microstructure analyses at different depths of nitrogen-implanted layers formed on 40 Cr steel, Zhu Zhongsheng, Jin Zuqin and Chen Yuanru B43 (1989) 92
Investigation of aluminium made by powder metallurgy by using the CPAA method, Takács, S., F. Ditrói and I. Mahunka B43 (1989) 99
Application of an MGC-20 cyclotron and methods of radioecology in solution of problems of forestry and the wood industry, Béres, Cs., A. Fenyvesi, P. Jakucs, I. Mahunka, Z. Kovács, T. Molnár, L. Szabó and F. Ditrói B43 (1989) 101
Channeling investigations of irradiation induced defects in a dilute Cu–Mn alloy, Müller, M. B43 (1989) 181
An alternative technique for oxygen surface coverage measurements, Lennard, W.N., S.Y. Tong, I.V. Mitchell and G.R. Massoumi B43 (1989) 187
Surface composition of GaAs determined by means of Rutherford backscattering spectrometry, Bachmann, T., K. Gärtner and E. Wendler B43 (1989) 193
Foil thickness measurement via the K_β/K_α intensity ratio of proton-induced X-rays, Campbell, J.L., W.J. Teesdale and J.A. Maxwell B43 (1989) 197
A new method for thin-film thickness measurement using PIXE, Miranda, J., A. Oliver and E.C. Montenegro .. B43 (1989) 203
Beam distribution in the skew profile geometry for PIXE setup with a diffuser foil, Jaracz, P. and S. Mirowski .. B43 (1989) 210
Electron density measurement on the MT-1 tokamak by means of combined resonance-fluorescence and laser blow-off, Kocsis, G., J.S. Bakos, G. Bürger and P.N. Ignácz B43 (1989) 215
An exact treatment of secondary and tertiary fluorescence enhancement in PIXE, Campbell, J.L., J.-X. Wang, J.A. Maxwell and W.J. Teesdale B43 (1989) 539
Trace element variability in kidney stones, Galassini, S., N.Q. Liu, G. Moschini, A. Tasca, G. Villi and V. Valkovic B43 (1989) 556
X-ray and Raman studies of MeV ion-bombarded GaInAs/GaAs, Wie, C.R., G. Burns, F.H. Dacol, G.D. Pettit and J.M. Woodall B43 (1989) 560

A new method for profiling boron, Lu Xiting, Xie Yuan, Zheng Zhongshuang, Jiang Weilin and Liu Jiarui B43 (1989) 565
Channeling and photoluminescence studies of heat-treated InP single crystals, Banerjee, S., B.M. Arora, M.B. Kurup and K.G. Prasad B43 (1989) 570

Experimental methods and equipment

An external beam setup for the Lund proton microprobe, Lövestam, N.E.G. and E. Swietlicki B43 (1989) 104
A novel krypton gas target, Meyer Jr, W., P. Plascjak, R. Finn, Y. Sheh, S. Regdos and A. Mignerey B43 (1989) 112
X-ray emission yields from both surfaces of thin targets bombarded with a 200-MeV H^- beam, Vanier, P.E., M.S. Zucker and C.L. Snead Jr B43 (1989) 116
Residual radioactivity at the Milan AVF cyclotron, Birattari, C., M.C. Cantone, A. Ferrari and M. Silari B43 (1989) 119
The Guelph PIXE software package, Maxwell, J.A., J.L. Campbell and W.J. Teesdale B43 (1989) 218
A CO_2 negative ion source for ^{14}C dating, Middleton, R., J. Klein and D. Fink B43 (1989) 231
On the onset voltage of liquid metal ion sources, Mair, G.L.R. B43 (1989) 240
Triple ion beam irradiation facility, Lewis, M.B., W.R. Allen, R.A. Buhl, N.H. Packan, S.W. Cook and L.K. Mansur B43 (1989) 243
High density atomic beam source by a laser ablation method (*Letter to the Editor*) Katsuragawa, H., T. Minowa and T. Inamura B43 (1989) 259
Characterization of the response function of a Si(Li) detector using an absorber technique, Larsson, N.P.-O., U.A.S. Tapper and B.G. Martinsson B43 (1989) 574
The influence of a water/tissue phantom on the response of a CR-39-based thermal-neutron dosimeter, Matiullah and N. Ahmad B43 (1989) 581

Letters to the editor

Comment on "The composition of kamacite in iron meteorites investigated by accelerator mass spectrometry, neutron activation analysis and analytical electron microscopy" by K.L. Rasmussen et al., Fehn, U., P.W. Kubik, P. Sharma and R.T.D. Teng B43 (1989) 254
Negative ion production efficiencies for the OSIRIS experiment on iron meteorites: a reply to Fehn et al., Rasmussen, K.L. B43 (1989) 256
High density atomic beam source by a laser ablation method, Katsuragawa, H., T. Minowa and T. Inamura ... B43 (1989) 259
A simple way to study secondary ion emission by heavy multicharged ions at medium energy (≈ 115 keV). Application to hydrogen ion emission, Brunelle, A., S. Della-Negra, J. Depauw, H. Joret and Y. Le Beyec .. B43 (1989) 586

Book reviews

Physics of solid surfaces 1987 (Proceedings 4th Symposium on Surface Physics, Bechyne Castle, Czechoslovakia, September 1987) edited by J. Koukal (Reviewer: P.J. Møller) B43 (1989) 127
Electron and ion optics, by M. Szilagyi (Reviewer: P.A. Miller) B43 (1989) 589